

Date: January 5, 2016

To: Thomas J. Bonfield, City Manager
Through: Wanda S. Page, Deputy City Manager
From: Kerry L. Goode, CIO/Director of Technology Solutions
Subject: Purchase of ESRI Software Maintenance Services

Executive Summary

The City and County have been using software products developed by Environmental Systems Research Institute, Inc. (“ESRI”) for the Geographic Information System (“GIS”) operation since 1990. ESRI’s products are the foundation of the City’s GIS operation. These products are used for GIS data creation and manipulation, data access and analysis, application program and user interface development and spatial database management.

In addition to new products, ESRI releases upgrades to its base products at least once a year. Some of the upgrades are mainly for problem fixes, but most upgrades include new features and functionalities, that are often necessary to improve the effectiveness of the GIS operation and system performance. In order for the City to receive these improvements to the software and technical support, the City must purchase software maintenance service from ESRI on the products used in the GIS operation. Maintaining effective system performance and making continual improvements to the system are key objectives for GIS operation and management, and the City has always purchased maintenance service for all of the ESRI software products used by the City and County on an annual basis. The proposed renewal of maintenance service is for a period of twelve months, February 26, 2016 to February 25, 2017. The funding for the software maintenance agreement is included in the Technology Solutions budget for this fiscal year.

Recommendation

The administration recommends that the City Council authorize the City Manager to execute an agreement with Environmental Systems Research Institute, Inc. in the amount of \$98,350 to cover the period of one year for software maintenance service.

Background

Software products offered by ESRI have been the foundation of the countywide GIS operation in Durham since 1990. As the use of GIS increased in our organization, the City continued to purchase additional software tools available from ESRI for improved data accessibility, user empowerment and database management. The GIS web sites have been some of the most visited sites among the City’s web pages. The following software products are currently used for the GIS operation:

- ArcMAP (Arc/Info, ArcEditor, ArcView) is the foundation of ESRI’s software product family and allows GIS data creation, update, query, mapping, and analysis. The City has been utilizing this base software product since 1990 for GIS operation.

- ArcServer is a gateway that facilitates managing spatial data in a database management system and provides the foundation for disseminating GIS data and mapping services via the Internet. ArcServer allows us to manage geographic information in Microsoft SQL Server databases. SQL Server is the City's standard database management system.
- ArcGIS 3D Analyst allows us to effectively visualize and analyze data in two or three dimensions. With this software, the City can begin creating three dimensional models and symbols for future data analysis.
- ArcGIS Spatial Analyst gives us the ability to do location and path analysis, perform statistical analysis based on spatially referenced data, and interpolate values for a study area based on samples.
- ArcGIS Network Analyst provides network-based spatial analysis including routing, travel directions, closest facility, and service area analysis.

Issues/Analysis

ESRI's software maintenance service includes software upgrades, technical support and user conference registrations. ESRI releases upgrades to various software products at least once a year. Some of the upgrades are mainly for problem fixes, but most upgrades include new features and improved functionalities. Durham's GIS architecture, a distributed GIS system implemented countywide, requires many of the sophisticated GIS software products provided by ESRI. New features and functionalities are often necessary to improve the effectiveness of the GIS operation and system performance.

As the City and County continue to use innovative ways to provide better customer services to the citizens of Durham, the staff in the Technology Solutions Department is challenged with adopting new technology and methods for improved system performance. With the limited resources available for staff training in recent years, it is critical that the staff be able to get professional and technical assistance on software products and upgrades from ESRI's technical support team in a timely manner.

Maintaining effective system operations and making continual improvements to the system are key objectives for system management. The City has always purchased the maintenance service for all of the ESRI software products the City and County used in the past. The maintenance agreement is renewed with a purchase order on an annual basis after Council's approval.

Alternatives

The City can choose not to purchase software maintenance services from ESRI. Without the software maintenance services, the City and County will not receive any upgrades and support to software products, the base of the countywide GIS operation, and technical support from ESRI on any of the products currently used. This may result in lengthy service interruptions and repurchasing upgraded software products at full price in the future. This alternative is not recommended.

Financial Impact

The proposed purchase of software maintenance service, in the amount of \$98,350, is for a period of twelve months, February 26, 2016 to February 25, 2017. The funding required for the software maintenance services is included in the FY16 Technology Solutions budget.

SDBE Summary

The Department of Equal Opportunity/Equity Assurance reviewed the bid submitted by **ESRI, Inc. of Redlands, CA** and has determined that they are in compliance with the Ordinance to Promote Equal Opportunities in City Contracting.

SDBE Requirements

There were no SDBE firms to provide this service.

Workforce Statistics

The workforce statistics for **ESRI, Inc. of Redlands, CA** are as follows:

Total Workforce	3,101	100%
Total Females	1,078	35%
Total Males	2,023	65%
Black Males	54	2%
White Males	1,505	49%
Other Males	464	15%
Black Females	42	1%
White Females	742	24%
Other Females	294	9%

Attachments: Agreement from Environmental Systems Research Institute, Inc.